ABBREVIATIONS

					BBI (E VI) (IIIOI10				
∧ /⊏	ARCHITECT / ENGINEER	D	DAMPER - AUTOMATIC	LID	HOOD	MILE	MANUALE	0.0	CURRLY AIR RIFFLIGER
A/E AAHX	ARCHITECT / ENGINEER AIR TO AIR HEAT EXCHANGER	D D-1	OUTDOOR AIR DAMPER	HD HOA	HOOD HAND/OFF/AUTOMATIC	MH MHP	MANHOLE	SD	SUPPLY AIR DIFFUSER
AB	AIR BLENDER						MOTOR HORSEPOWER	SDPR	SMOKE DAMPER
AAV	AUTOMATIC AIR VENT	D-2	RETURN AIR DAMPER RELIEF AIR DAMPER	HP	HEAT PUMP	MIN	MINIMUM	SDR	SMOKE DAMPER (RETURN)
ACC	AIR COOLED CONDENSER	D-3 DB	DECIBELS	HP HPDT	HORSEPOWER HIGH PRESSURE DRIP TRAP	MM MOV	MILLIMETER MOTOR OPERATED VALVE	SDS	SMOKE DAMPER (SUPPLY)
ACCH	AIR COOLED CHILLER	Db	DRY-BULB TEMPERATURE	HPR				SEN	SENSIBLE HEAT
ACCU	AIR-COOLED CHILLER AIR-COOLED CONDENSING UNIT	DDC	DIRECT DIGITAL CONTROLS	HPK	HIGH PRESSURE RETURN (STEAM CONDENSATE)	MPR	MEDIUM PRESSURE RETURN (STEAM	SF	SUPPLY FAN
ACU	AIR CONDITIONING UNIT	DEG	DEGREE	HPS	HIGH PRESSURE SUPPLY (STEAM)	MPS	CONDENSATE) MEDIUM PRESSURE STEAM	SG SH	SUPPLY AIR GRILLE STEAM HUMIDIFIER
ACD	AUTOMATIC CONTROL	DEG	DIFFUSER	HRC	HEAT RECOVERY COIL	MRI	MAGNETIC RESONANCE IMAGING	SHC	STEAM HEATING COIL
AOD	DAMPER,MODULATING	DIA	DIAMETER	HRD	HEAT RECOVERY DEVICE	MTD	MEAN TEMPERATURE DIFFERENCE	SI	SQUARE INCHES
ACD-TP	AUTOMATIC CONTROL DAMPER,TWO	DIW	DEIONIZED WATER	HRP	HYDRONIC RADIANT (CEILING) PANEL	MVD	MANUAL VOLUME DAMPER	SP	STATIC PRESSURE
	POSITION	DP	DEW POINT TEMPERATURE	HRW	HEAT RECOVERY WHEEL	MZ	MULTI-ZONE	SP GR	SPECIFIC GRAVITY
AD	ACCESS DOOR	DP	DIFFUSER PLATE	HSTAT	HUMIDISTAT		11102112	SPD	SUPPLY PROCESS AND DISTRIBUTION
AF	AFTER FILTER	DPA	DIFFERENTIAL PRESSURE ASSEMBLY	HTM	HUMIDIFIER TERMINAL	NA	NOT APPLICABLE	SPRV	STEAM PRESSURE REDUCING VALVE
AFCV	AIR FLOW CONTROL VALVE	DPS	DIFFERENTIAL PRESSURE SENSOR	HUM	HUMIDIFIER UNIT MOUNTED	NC	NOISE CRITERIA	SPS	STATIC PRESSURE SENSOR
AFF	ABOVE FINISHED FLOOR	DX	DIRECT EXPANSION	HVU	HEATING AND VENTILATING UNIT	NC	NORMALLY CLOSED	SQ FT	SQUARE FOOT (FEET)
AFMD	AIR FLOW MEASURING DEVICE	DXCC	DIRECT EXPANSION COOLING COIL	HW	HOT WATER	NG	NATURAL GAS	SR	SUPPLY AIR REGISTER
AFW	AIR FOIL WHEEL (FAN)			HWC	HOT WATER COIL	NGFM	NATURAL GAS FLOWMETER	SS	STAINLESS STEEL
AHU	AIR-HANDLING UNIT	EA_	EXHAUST AIR	HWHC	HOT WATER HEATING COIL	NO	NORMALLY OPEN	SSHX	STEAM TO STEAM HEAT EXCHANGER
AMP	AMPERGE	EAT	ENTERING AIR TEMPERATURE	HWP	HEATING HOT WATER PUMP	NOAA	NATIONAL OCEANIC & ATMOSPHERIC	SSR	SOLID SEPARATOR
AP	ACCESS PANEL	EC	EVAPORATIVE COOLER	HWR	HEATING HOT WATER RETURN		ADMINISTRATION	ST	STEAM TRAP
APD ARI	AIR PRESSURE DROP AIR CONDITIONING AND	ECC	ENGINEERING CONTROL CENTER	HWS	HEATING HOT WATER SUPPLY	NOM	NOMINAL	SUH	STEAM UNIT HEATER
ARI	REFRIGERATION INSTITUTE	ECU EDH	EVAPORATIVE CONDENSER UNIT ELECTRIC DUCT HEATER	HWUH	HOT WATER UNIT HEATER	NPLV	NON-STANDARD PART LOAD VALUE	SV	STEAM PRESSURE REDUCING VALVE
AS	AIR SEPARATOR	EER	ENERGY EFFICIENCY RATIO	HVD HX	HOISTWAY VENT DAMPER HEAT EXCHANGER	NPSH NTS	NET POSITIVE SUCTION HEAD	SVS	STEAM VENT SILENCER
ASME	AMERICAN SOCIETY OF MECHANICAL	EF	EXHAUST FAN	HZ	HERTZ	NIS	NOT TO SCALE	SWHX	STEAM TO WATER HEAT EXCHANGER
AOME	ENGINEERS	EG	EXHAUST GRILLE	П	HERTZ	OA	OUTSIDE AIR	T & PCV	TEMPERATURE AND PRESSURE
AW	AIR WASHER	EGS	EMERGENCY GAS SHUTOFF	I/O	INPUT/OUTPUT	OAG	OUTSIDE AIR OUTSIDE AIR GRILLE	IAPCV	CONTROL VALVE
AXF	AXIAL FLOW	EGT	ENTERING GLYCOL TEMPERATURE	IAQ	INDOOR AIR QUALITY	OAI	OUTSIDE AIR ORILLE	TAB	TESTING, ADJUSTING, BALANCE
700	7011/121 2011	EH.	EXHAUST HOOD	IBT	INVERTED BUCKET TRAP	OD	OUTSIDE DIAMETER	TD	TEMPERATURE DIFFERENCE
В	BOILER	EJ	EXPANSION JOINT	ICF	IN-LINE CENTRIFUGAL FAN	OFM	OIL FLOWMETER	TDH	TOTAL DYNAMIC HEAD
BD	BUTTERFLY DAMPER	EMD	END OF MAIN DRIP (STEAM)	ICU	INTENSIVE CARE UNIT	OR	OPERATING ROOM	TDS	TOTAL DISSOLVED SOLIDS
BDD	BACKDRAFT DAMPER	ENT	ENTERING	ID	INSIDE DIAMETER			TG	TRANSFER GRILLE
BDR	BASE BOARD RADIATOR	ER	EXHAUST REGISTER	IFB	INTEGRAL FACE AND BYPASS	Р	PUMP	TP	TRAP
BFP	BACKFLOW PREVENTER	ERC	ELECTRIC REHEAT COIL	IN	INCHES	PA	PASCAL	TR	TOP REGISTER
BFT	BOILER PLANT FIRE TUBE	ERP	ELECTRIC RADIANT PANEL	IN HG	INCHES OF MERCURY	PC	PUMPED CONDENSATE	TSP	TOTAL STATIC PRESSURE
BG	BOTTOM GRILLE	ESP	EXTERNAL STATIC PRESSURE	IN WC	INCH WATER COLUMN	PCF	POUNDS PER CUBIC FOOT (FEET)	TSTAT	THERMOSTAT
BHP	BRAKE HORSEPOWER	ET	EXPANSION TANK	IN WG	INCH WATER GAUGE	PD	PRESSURE DROP	TU	TERMINAL UNIT
BHW	HOT WATER HEATING BOILER	ETO	ETHYLENE OXIDE	IN-LB	INCH-POUND	PEF	PROPELLER (TYPE) EXHAUST FAN	TWU	THRU-WALL UNIT
BHX	BOILER BLOWDOWN HEAT	EUH EWC	ELECTRIC UNIT HEATER	IPLV	INTERGRATED PART LOAD VALUE	PF	PRE-FILTER		
BIW	EXCHANGER BACKWARD INCLINED WHEEL (FAN)	EWT	EVAPORATIVE WATER COOLER ENTERING WATER TEMPERATURE	IRH	INTRARED HEATER	PG	PRESSURE GAGE	UC	UNDER CUT
BMT	BONE MARROW TRANSPLANT	EX.	EXISTING WATER TEMPERATURE EXISTING	IS IU	INSECT SCREEN INDUCTION UNIT	PGW	PROPYLENE GLYCOL-WATER	UC	UNIT COOLER
BR	BOTTOM REGISTER	EA.	EXISTING	IV	INDUCTION UNIT	PHC	(SOLUTION) PREHEAT COIL	UH UL	UNIT HEATER UNDERWRITERS LABORATORY
BSC	BIOLOGICAL SAFETY CABINETS	F	FAHRENHEIT	IV	INLET VAINES	PPM	PARTS PER MILLION	URV	UPBLAST UNIT VENTILATOR
BT	BLOWOFF TANK	F&T	FLOAT AND THERMOSTATIC	kg	KILOGRAM	PRS	PRESSURE REGULATING (VALVE)	OITV	OFBEAST ONLY VENTILATOR
BTC	BLOWOFF TANK CONTROL VALVE	F/SDPR	COMBINATION FIRE SMOKE DAMPER	kg/HR	KILOGRAM PER HOUR	1110	STATION	V	VALVE
BTU	BRITISH THERMAL UNIT	FA	FREE AREA	kPa	KILOPASCAL	PRV	PRESSURE REGULATING VALVE	VAF	VANE-AXIAL FAN
BTUH	BRITISH THERMAL UNIT PER HOUR	FC	FLEXIBLE CONNECTION	kW	KILOWATT	PSI	POUNDS PER SQUARE INCH	VAV	VARIABLE AIR VOLUME
BWT	BOILER PLANT WATER TUBE	FCU	FAN COIL UNIT (4 PIPE)	kWh	KILOWATT HOUR	PSIA	POUNDS PER SQUARE INCH -	VD	VOLUME DAMPER (MANUAL OPPOSED
		FCUC	FAN COIL UNIT COOLING ONLY				ABSOLUTE		BLADE)
С	CENTIGRADE (CELCIUS)	FCUH	FAN COIL UNIT HEATING ONLY	L	LITER	PSIG	POUNDS PER SQUARE INCH - GAGE	VFD	VARIABLE FREQUENCY DRIVE
CC	COOLING COIL	FCW	FORWARD CURVED WHEEL (FAN)	L/h	LITERS PER HOUR	PSS	PRIMARY SECONDARY SYSTEM	VHA	VETERANS HEALTH ADMINISTRATION
CCD	COOLING COIL CONDENSATE DRAIN	FD	FLOOR DRAIN	L/m	LITERS PER MINUTE	PSV	PRESSURE SAFETY VALVE	VI	VIBRATION ISOLATOR
CD	CEILING DIFFUSER	FD	FIRE DAMPER	L/s_	LITERS PER SECOND	PTAC	PACKAGED TERMINAL AIR	VIV	VARIABLE INLET VANES
CENT CFH	CENTRIFICAL	FF	FINAL FILTER	LAT	LEAVING AIR TEMPERATURE		CONDITIONER	VP	VACUUM PUMP
CFM	CUBIC FEET PER HOUR CUBIC FEET PER MINUTE	FHX	FLUE GAS/FEEDWATER HEAT EXCHANGER	LBS/HR	POUNDS PER HOUR	D/E	DETURN OR EVITATION	VPS	VARIABLE PRIMARY SYSTEM
CFT	CUBIC FEET PER MINOTE	FM	FLOW METER	LF LGT	LINEAR FOOT (FEET)	R/E	RETURN OR EXHAUST	VR	VACUUM (STEAM CONDENSATE)
CFP	CHEMICAL FEED PUMP	FOP	FUEL OIL PUMP	LGT	LEAVING GLYCOL TÉMPERATURE LATENT HEAT	RA RAD	RETURN AIR REFRIGERANT AIR DRYER	VSD	RETURN VARIABLE SPEED DRIVE
CG	CEILING GRILLE	FOT	FUEL OIL TANK	LPG	LIQUID PROPANE GAS	RAF	RADIO FREQUENCY	VUH	VERTICAL UNIT HEATER
CH	CHILLER	FOHX	FUEL OIL HEAT EXCHANGER	LPR	LOW PRESSURE RETURN (STEAM	RAHX	ROTARY AIR HEAT EXCHANGER	VOIT	VERTICAL UNIT HEATER
CHP	CHILLED WATER PUMP	FPM	FEET PER MINUTE	· · ·	CONDENSATE)	RAT	RETURN AIR TEMPERATURE	W	WATTS
CHW	CHILLER WATER	FPS	FEET PER SECOND	LPRC	LOW PRESSURE STEAM RETURN	RCCH	REMOTE CONDENSER CHILLER	WAG	WASTE ANETHESIA GAS
CHR	CHILLED WATER RETURN	FPTU	FAN POWERED TERMINAL UNIT	100.000	(CLEAN)	RCU	RECIPROCATING CHILLER UNIT	Wb	WET-BULB (TEMPERATURE)
CHS	CHILLED WATER SUPPLY	FR	FLOOR REGISTER	LLHX	LIQUID TO LIQUID HEAT EXCHANGER	RD	REFRIGERANT DISCHARGE	WC	WATER COOLED
CI	CAST IRON	FRP	FIBER REINFORCED POLYESTER	LPS	LOW PRESSURE STEAM	RDS	ROOM DATA SHEETS	WCCH	WATER COOLED CHILLER
СМ	CARBON MONOXIDE	FS	FLOW SWITCH	LPSC	LOW PRESSURE STEAM (CLEAN)	REA	RELIEF AIR	WCCU	WATER COOLED CONDENSING UNIT
CM	CUBIC METER	FSTAT	FREEZESTAT	LSD	LINEAR SLOT DIFFUSER	RF	RETURN FAN	WCHP	WATER COOLED HEAT PUMPS
CM/S	CUBIC METER PER SECOND	FT .	FEET	LTCP	LOCAL TEMPERATURE CONTROL	RG	RETURN GRILLE	WCPU	WATER COOLED PACKAGED UNIT
CO	CLEAN OUT	FT-LB	FOOT-POUND	7.7	PANEL	RH	RELATIVE HUMIDITY	WEF	WALL EXHAUST FAN
CO2	CARBON DIOXODE	FTR	FIN TUBE RADIATION	LVG	LEAVING	RHC	REHEAT COIL	WF	WATER FILTER
COMP COP	COMPRESSOR UNIT COEFFICIENT OF PERFORMANCE	FV	FACE VELOCITY	LVR	LOUVER	RHG	REFRIGERANT HOT GAS	WFCV	WATER FLOW CONTROL VALVE
CP	CONDENSATE PUMP	GA	GAUGE	LWT	LEAVING WATER TEMPERATURE	RL BLA	REFRIGERANT LIQUID LINE	WFM	WATER FLOWMETER
CR	CEILING REGISTER	GAL	GALLONS	М	METER, SI UNIT	RLA	RUN LOAD AMPERE	WFMD	WATER CACE
CS	CONDENSATE STORAGE TANK	GAL	GRAVITY HOOD	M/s	METER, STUNIT METERS PER SECOND (OR	RO RPM	REVERSE OSMOSIS REVOLUTIONS PER MINUTE	WG	WATER SIDE DESSURE DROP
CSG	CLEAN STEAM GENERATOR	GPD	GALLONS PER DAY	IVI/S	METERS PER SECOND (OR METERS/SECOND)	RPM RR	RETURN REGISTER	WPD	WATER SIDE PRESSURE DROP
CT	COOLING TOWER	GPH	GALLONS PER HOUR	MA	MIXED AIR	RS	REFRIGERANT SUCTION	YR	YEAR
CU	CONDENSING UNIT	GPM	GALLONS PER MINUTE	MAT	MIXED AIR MIXED AIR TEMPERATURE	RTU	ROOF TOP UNIT	IN	ILAN
CUH	CABINET UNIT HEATER	GPR	GAS PRESSURE REGULATOR	MAU	MAKE-UP AIR UNIT	RV	RELIEF VALVE		
CV	CONSTANT VOLUME	GS	GALVANIZED STEEL	MAV	MANUAL AIR VENT	SA	SUPPLY AIR		
CW	COLD WATER (POTABLE)	V	- Lander Lander data (2006 - Authority medi (2007) 2007	MAX	MAXIMUM	SAD	SOUND ATTENUATING DEVICE		
CWCC	CHILLED WATER COOLING COIL	Н	HUMIDIFER	MB	MIXING BOX	SAT	SUPPLY AIR TEMPERATURE		
CWP	CONDENSER WATER PLIMP	H&C\M	HOT & COLD WATER	MRH	1000 BTUH	90	SHADING COEFFICIENT		

MINIMUM BRANCH CIRCUIT AMPACITY

MECHANICAL EQUIPMENT ROOM

MINIMUM EFFICIENCY REPORTING

1000 BTUH

MCA

MERV

MECHANICAL GENERAL NOTES

- ALL WORK SHALL CONFORM TO ALL LOCAL, STATE, AND NATIONAL CODES ALONG WITH ALL VA STANDARDS. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S
- THE MECHANICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES, AND INSPECTIONS REQUIRED FOR HIS WORK.

EQUIPMENT DEVIATIONS SUBMITTED SHALL BE SIMILAR BOTH IN QUALITY AND CAPACITY TO THAT EQUIPMENT SPECIFIED.

- ALL MATERIALS, EQUIPMENT AND PRODUCTS INCORPORATED IN THE WORK UNDER THE CONTRACT SHALL BE NEW, OF A SUITABLE GRADE FOR THE PURPOSES INTENDED, AND TO THE EXTENT POSSIBLE, STANDARD PRODUCTS OF THE VARIOUS MANUFACTURERS EXCEPT WHERE SPECIAL CONSTRUCTION OR PERFORMANCE FEATURES ARE CALLED FOR.
- ANY EQUIPMENT OR MATERIAL DEVIATIONS FROM THAT SPECIFIED OR DETAILED ON THIS DRAWING SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT/ENGINEER. ALL PROPOSED
- 5 ALL MECHANICAL EQUIPMENT SHALL BE LISTED AND LABELED BY UNDERWRITERS LABORATORIES (U.L.).
- THE MECHANICAL CONTRACTOR SHALL INSTALL EQUIPMENT AS SHOWN ON THE DRAWINGS ALLOWING FOR SUFFICIENT ACCESS AND CLEARANCE SPACE FOR EQUIPMENT MAINTENANCE, REPAIRS AND REPLACEMENT. PROVIDE PROPER CLEARANCES FOR REQUIRED PIPING AND ELECTRICAL SERVICES AND CONNECTIONS. INSTALL ALL EQUIPMENT WITH REQUIRED ACCESS AND CLEARANCES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS AND/OR WITH ALL APPLICABLE CODES AND STANDARDS.
- THE MECHANICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION AND ROUTING OF ALL PROPOSED DUCTWORK, PIPING AND EQUIPMENT WITHIN THE BUILDING STRUCTURE.
- THE MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL HIS OWN SUPPORT EQUIPMENT. LOCATIONS SHALL BE COORDINATED WITH ALL CONTRACTORS PRIOR TO INSTALLATION.
- 9 THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER CONNECTIONS TO THE EQUIPMENT PROVIDED UNDER THIS CONTRACT.
- THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTROL WIRING FOR HIS EQUIPMENT.
- DUCTWORK AND PIPING LAYOUTS AND LOCATIONS ARE SCHEMATIC. DO NOT SCALE THESE DRAWINGS. EXACT ROUTING OF DUCTWORK AND PIPING MUST BE DETERMINED IN THE FIELD. ALL DIMENSIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR BY ACTUAL MEASUREMENT AND OBSERVATION BEFORE ORDERING OR FABRICATING ANY DUCTWORK, PIPING OR EQUIPMENT. ANY DISCREPANCIES BETWEEN THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND THE EXISTING CONDITIONS OR DIMENSIONS SHALL BE REPORTED TO THE A/E AND VMAC COTR BEFORE THE PERFORMANCE OF ANY WORK. FAILURE TO VERIFY AND REPORT SHALL CONSTITUTE THE CONTRACTOR'S ACCEPTANCE OF THE EXISTING CONDITIONS AS FIT FOR THE PROPER EXECUTION OF HIS WORK. SEE ARCHITECTURAL DRAWINGS FOR FINAL LOCATION OF CEILING INSTALLED.
- DUCTWORK AND PIPING SHALL BE KEPT AS CLOSE AND HIGH AS POSSIBLE TO THE BUILDING WALLS, CEILING AND FLOOR AND ROOF STRUCTURE IN ORDER THAT THE MAXIMUM AMOUNT OF SPACE IS AVAILABLE. ADDITIONAL OFFSETS, FITTINGS, ETC. NOT SHOWN BUT REQUIRED TO MAINTAIN MAXIMUM CLEARANCE SHALL BE PROVIDED AT NO ADDITIONAL COST,
- 13 THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PATCHING, PAINTING AND CLEANING ASSOCIATED WITH THIS PROJECT UNLESS NOTED OTHERWISE.
- 14 PROVIDE A COMPLETE 1-YEAR WARRANTY ON ALL LABOR AND MATERIALS.
- 15 CONTRACTOR SHALL FURNISH A BOUND SET OF OPERATING AND MAINTENANCE INSTRUCTIONS FOR ALL EQUIPMENT TO THE OWNER UPON COMPLETION OF PROJECT.
- 16 INSTALL ESCUTCHEONS IN ALL PLACES WHERE PIPING PENETRATES A WALL IN AN EXPOSED LOCATION.
- THE MECHANICAL CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE MECHANICAL PLANS, INCLUDING THE SCHEDULES AND DETAILS PRIOR TO INSTALLATION OF ANY MECHANICAL SYSTEMS AND SHALL RESOLVE ANY CONFLICTS WITH THE ENGINEER.
- DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF PIPING SYSTEMS. INSTALL PIPING INDICATED TO BE EXPOSED AND PIPING IN EQUIPMENT ROOMS AND SERVICE AREAS AT RIGHT ANGLES OR PARALLEL TO BUILDING WALLS. DIAGONAL RUNS ARE PROHIBITED UNLESS SPECIFICALLY INDICATED OTHERWISE. INSTALL PIPING FREE OF SAGS AND BENDS. INSTALL PIPING TO ALLOW APPLICATION OF INSULATION
- THE MECHANICAL CONTRACTOR SHALL TAKE THE LEAD IN PREPARATION OF COORDINATION DRAWINGS. SUCH DRAWINGS SHALL BE COMPLETED WITH COORDINATION FROM THE GENERAL CONTRACTOR AND ALL OTHER MAJOR AND MINOR SUBCONTRACTORS. PROVIDE PLAN VIEWS, SECTIONS AND ELEVATIONS, AS REQUIRED, TO FULLY COORDINATE ALL NEW WORK WITH ITSELF AND EXISTING CONDITIONS. DRAWINGS SHALL SHOW, BUT NOT BE LIMITED TO, ALL DUCTWORK, AIR DISTRIBUTION, MECHANICAL EQUIPMENT, MECHANICAL PIPING, FIRE PROTECTION PIPING, PLUMBING PIPING, CABLE TRAYS, LIGHTING FIXTURES, CEILING GRID AND HEIGHT, BEAMS AND JOISTS (WITH ELEVATIONS MARKED). ELECTRICAL CONDUIT LARGER THAN 2 INCHES IN DIAMETER AND ANY OTHER CEILING MOUNT DEVICES OR EQUIPMENT THAT PROTRUDE INTO THE CEILING CAVITY. IF THERE ARE ANY OUTSTANDING ISSUES THAT CANNOT BE RESOLVED, CONSULT WITH ARCHITECT AND/OR ENGINEER (THROUGH THE VA COTR) FOR GUIDANCE AND MAKE CORRECTIONS IN ACCORDANCE WITH DIRECTIONS GIVEN. IT IS IMPORTANT TO NOTE THAT FABRICATION CANNOT BEGIN UNTIL COORDINATION DRAWINGS HAVE BEEN APPROVED. ANY INSTALLATION COMMENCED PRIOR TO APPROVAL IS TAKEN AT THE CONTRACTORS OWN RISK AND MAY HAVE TO BE MODIFIED, MOVED AND/OR RECONFIGURED AT CONTRACTORS COST.

BID ALTERNATES						
ALT	DESCRIPTION					
1	DO NOT PROVIDE DESIGNATED FALL DETERRENT/SECURITY SCREENING AND CARD READERS AT ENTRANCES TO STAIRWELLS. REFER TO DRAWINGS ON GI103 FOR EXTENT OF FALL DETERRENT/SECURITY SCREENING TO BE REMOVED. DO NOT PROVIDE CARD READERS AT ENTRANCE TO STAIR TOWERS FOR DOORS LL05 AND 104.					
2	DO NOT PROVIDE THE BRICK VENEER AT THE NORTHEAST STAIR TOWER AND THE SOUTHWEST STAIR TOWER. DO NOT PROVIDE THE ALUMINUM STOREFRONT WINDOW ENCLOSURE OF THE NORTHEAST STAIR TOWER. PROVIDE METAL GUARDRAILS AT WINDOW OPENINGS IN LIEU OF ALUMINUM STOREFRONT.					
3	DO NOT PROVIDE FALL DETERRENT IN ITS ENTIRETY ON ALL LEVELS.					
4	DO NOT PROVIDE AREA #1 - LEVEL 3. REFER TO DRAWINGS ON GI103 FOR EXTENT OF AREA DEDUCT.					
5	DO NOT PROVIDE THE ALUMINUM STOREFRONT ENCLOSURE OF THE TOP FLOOR (LEVEL 3) LOBBY ENCLOSURE. DO NOT PROVIDE THE ALUMINUM STOREFRONT WINDOW ENCLOSURE OF THE SOUTHWEST STAIR TOWER. PROVIDE METAL GUARDRAILS AT WINDOW OPENINGS IN LIEU OF ALUMINUM STOREFRONT.					
6	DO NOT PROVIDE AREA #2 - LEVEL 3. REFER TO DRAWINGS ON GI103 FOR EXTENT OF AREA DEDUCT.					
7	DO NOT PROVIDE AREA #3 - LEVEL 3. REFER TO DRAWINGS ON GI104 FOR EXTENT OF AREA DEDUCT.					
8	DO NOT PROVIDE AREA #4 - LEVEL 2. REFER TO DRAWINGS ON GI104 FOR EXTENT OF AREA DEDUCT. DO NOT PROVIDE SECOND ELEVATOR #2 AND ASSOCIATED EQUIPMENT.					
9	DO NOT PROVIDE PTZ AND FIXED CAMERAS THROUGHOUT GARAGE. ALL INFRASTRUCTURE IS TO REMAIN IN BASE BID FOR FUTURE CONNECTIVITY.					

			HVAC DESIGN	DATA			
	SUMMER				WINTER		
DESIGN CONDITIONS	TEMP	WET BULB TEMP	% HUMIDITY	TEMP	DEWPOINT TEMP	% HUMIDITY	LOWEST AVERAGE ANNUAL DEWPOINT
OUTDOOR DESIGN CONDITIONS	90.3 °F	74.6 °F	48.5 %	-4.0 °F	-16.0 °F	20	-10 °F
ELECTRICAL ROOM	86.0 °F			40.0 °F			
SECURITY/IT	80.0 °F						
STORAGE							
ELEVATOR MACHINE ROOM	77.0 °F			50.0 °F			

HOSE BIBB

HEATING COIL

HOT & COLD WATER

HOUSEKEEPING AID CLOSET

CONDENSER WATER PUMP

COOLING TOWER)

COOLING TOWER)

C:\Users\Omar Ruiz Diaz\Documents\14-692-Mech-

Revisions:

CONDENSER WATER RETURN (TO

CONDENSER WATER SUPPLY (FROM



5000 W. National Ave. Milwaukee, WI 53295

VAMC MILWAUKEE

U.S. Department of Veterans Affairs





STANDARD CUBIC FEET PER MINUTE

SILICON CONTROLLED RECTIFIER

SHADING COEFFICIENT

SPINAL CODE INJURY

SMOKE DETECTOR



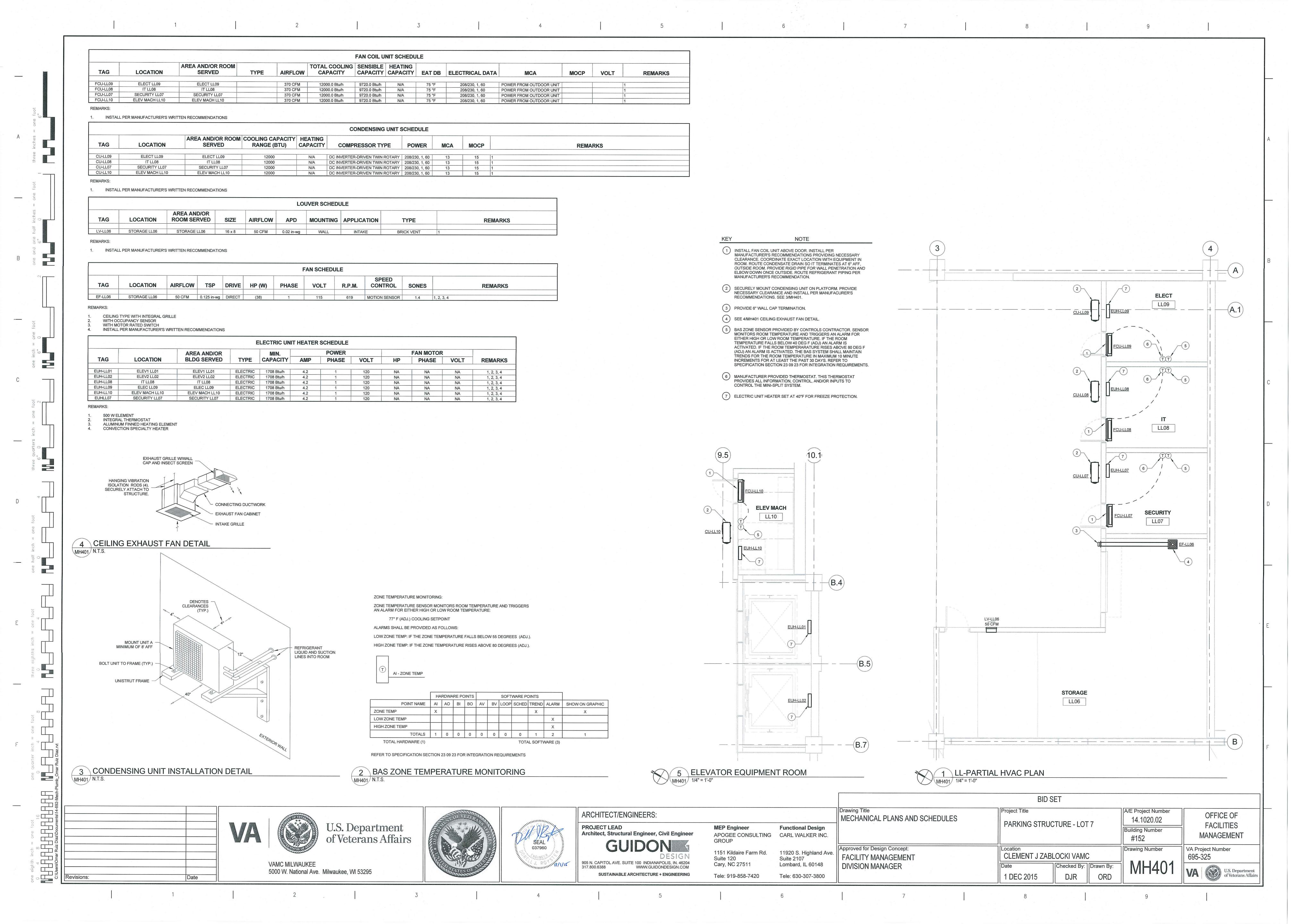
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SUSTAINABLE ARCHITECTURE + ENGINEERING

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	BID S	ET			
MECHANICAL NOTES AND LEGEND	Project Title PARKING STRUCTURE - LOT 7			A/E Project Number 14.1020.02 Building Number #152	OFFICE OF FACILITIES MANAGEMENT
Approved for Design Concept: FACILITY MANAGEMENT DIVISION MANAGER	CLEMENT J ZABLOCKI VAMC Date 1 DEC 2015 Checked By: Drawn By: ORD			Drawing Number MI001	VA Project Number 695-325 VA U.S. Department of Veterans Affairs



ELECTRICAL ABBREVIATIONS LIST 1 POLE (2P, 3P, 4P, ETC.) SURFACE MOUNTED GALVANIZED RIGID STEEL COORDINATE NORMALLY CLOSED TWO-CONDUCTOR (3/C, 4/C, ETC.) CONTROL POWER TRANSFORMER SWITCHBOARD NATIONAL ELECTRICAL CODE GYP BD GYPSUM BOARD TWO-WIRE (3W, 4W, ETC.) COLOR RENDERING INDEX NATIONAL ELECTRICAL SYMMETRICAL CURRENT TRANSFORMER MANUFACTURER'S SYSTEM HIGH-INTENSITY DISCHARGE A,AMP CABLE TELEVISION ALARM ANNUMCIATOR PANE CENTER HAND-OFF-AUTOMATIC NFDS NON-FUSED SAFETY TIMECLOCK ABOVE COUNTER HORSEPOWER ISCONNECT SWITCH AIR CONDITIONER CUBIC FEET NOT IN CONTRACT TEL/DATA TELEPHONE/DATA ALTERNATING CURRENT NORMALLY OPEN TELECOM GROUNDING BUS BAR ACCESSIBLE DIRECT BURIAL HIGH VOLTAGE NOT TO SCALE TELECOM MAIN GROUNDING BUS BAR ABOVE CEILING HEATING, VENTILATING AND AUTOMATIC DOOR OPENER DIMMER CONTROL PANEL ON CENTER SHIELDED TWISTED PAIR DEGREES CELSIUS ARCHITECH/ENGINEER **OUTSIDE DIAMETER** TAMPER RESISTANT AVAILABLE FAULT CURRENT (KILOAMPS) DEMO DEMOLISH/DEMOLITION INSIDE DIAMETER OVERLOAD TELEPHONE TERMINAL BOARD ILLUMINATION ENGINEERING SOCIETY TELEPHONE TERMINAL **PUBLIC ADDRESS** PHYSICAL ACCESS CONTROL SYSTEM TV ARC FAULT CIRCUIT DISTRIBUTION INTERMEDIATE METAL CONDUIT PULL BOX OR PUSHBUTTON AUTHORITY HAVING JURISDICTION **INCANDESCENT** PREFABRICATED BEDSIDE AIR HANDLING UNIT INTERLOCK WITH POLYCHLORINATED BIPHENYL UNDERGROUND ELECTRICAL AMPERE INTERRUPTING CAPACITY DOUBLE THROW DRAWING INSTANTEOUS WATER HEATER PHOTOELECTRIC CELL UNDERGROUND ALUMINUM UNIT HEATER INFORMATION TECHNOLOGY ELECTRICAL CONTRACTOR UNDERWRITER'S LABORATORY AMPERE POWER FACTOR UNDERGROUND TELEPHONE APPROXIMATELY JUNCTION BOX EQUIPMENT GROUND ARCH ARCHITECT, ARCHITECTURAL ELECTRIC, ELECTRICAL UNSHIELDED TWISTED PAIR PASSIVE INFRARED ELEVATOR UNIT VENTILATOR OR KILOVOLT-AMPERE AUTOMATIC TRANSFER SWITCH POST INDICATING VALVE ELECTROMAGNETIC INTERFERENCE KVAR KILOVOLT-AMPERE REACTIVE AUTOMATIC POWER-OVER-ETHERNET AUX AUXILIARY ENERGY MANAGEMENT SYSTEM ELECTRICAL METALLIC TUBING KILOWATT HOUR AUDIO VISUAL **VOLT-AMPERES** AWG EMERGENCY POWER OFF AMERICAN WIRE GAUGE LIGHT-EMITTING DIODE PROJECTION EQUIPMENT EASMENT POWER ROOF VENTILATOR VARIABLE FREQUENCY DRIVE BUILDING AUTOMATION SYSTEM LINEAR FEET/FOOT ELECTRIC WATER COOLER POTENTIAL TRANSFORMER VOLUME LIGHTNING PROTECTION SYSTEM BARE COPPER ELECTRIC WALL HEATER POLYVINYL CHLORIDE ELECTRIC WATER HEATER LOW PRESSURE SODIUM BELOW FINISHED FLOOR LOCKED ROTOR AMPS POWER WATER HEATER EXPLOSION PROOF **BUILDING MANAGEMENT** LIGHTING FIRE ALARM WEATHERPROOF BYP FIRE ALARM ANNUNCIATOR PANEL LOW VOLTAGE REFLECTED CEILING PLAN FIRE ALARM CONTROL PANEL RECEPTACLE TRANSFORME MASTER ANTENNA TELEVISION FAN COIL UNIT RIGID GALVANIZED STEEL FULL-LOAD AMPS MECHANICAL CONTRACTOR RIGID METAL CONDUIT CATALOG, CATEGORY METAL-CLAD (CABLE) ROOT MEAN SQUARE FLUORESCENT MINIMUM CIRCUIT AMPACITY ROOF TOP UNIT CIRCUIT BREAKER FLEXIBLE METAL CONDUIT MAIN CIRCUIT BREAKER MOTOR CONTROL CENTER SURFACE CONDUIT CLOSED CIRCUIT TELEVISION FUSED SAFETY DISCONNECT MAIN DISTRIBUTION PANEL SQUARE FEET/FOOT MECHANICAL FULL VOLTAGE REVERSING FULL VOLTAGE NON-REVERSING INTERNATIONAL SYSTEM OF UNITS CONTRACTOR-FURNISHED MAIN FUSED DISCONNECT SOLID NEUTRAL COAXIAL CABLE MICROPHONE SPECIFICATION GALVANIZED COMMUNICATION GENERAL CONTRACTOR SPEAKER CONNECTION GENERATOR MISCELLANEOUS CONSTRUCTION GROUND FAULT CIRCUIT SURFACE RACEWAY MAIN LUGS ONLY CONTINUATION OR MULTIOUTLET ASSEMBLY STAINLESS STEEL SUPPLY-SIDE BONDING JUMPER CONTINUOUS MOTOR-RATED SWITCH MAIN SWITCHBOARD SELECTOR SWITCH STOP/START PUSHBUTTONS MANUAL TRANSFER SWITCH STANDARD MOTOR MOTORIZED

ELECTRICAL SYMBOL LEGEND SYMBOL HEIGHT DESCRIPTION 120V DUPLEX RECEPTACLE 120V DUPLEX RECEPTACLE EMERGENCY 120V QUADRUPLEX RECEPTACLE 120V QUADRUPLEX RECEPTACLE EMERGENCY RECEPTACLE MODIFIERS: GFI: GROUND FAULT CURRENT INTERUPTER WP: WEATHERPROOF ENCLOSURE JUNCTION BOX, PURPOSE AS NOTED 72" TOP DISCONNECT SWITCH NON-FUSED 72" TOP DISCONNECT SWITCH FUSED DATA/TELCO OUTLET DATA OUTLET TELCO OUTLET SINGLE POLE WALL SWITCH: 44" AFF STANDARD UNO SWITCH MODIFIERS: M: MOTOR-RATED OC: OCCUPANCY SENSOR, DUAL TECHNOLOGY ELECTRONIC TIMER VC: VACANCY SENSOR, DUAL TECHNOLOGY CARD READER CARD READER WITH KEYPAD ELECTRONIC LOCKING MECHANISM DOOR CONTACT REQUEST FOR EXIT SENSOR CCTV DOME CAMERA CCTV CAMERA MODIFIERS: PTZ: PAN/TILT/ZOOM PUSH PLATE/DOOR SWITCH AUTOMATIC DOOR OPERATOR **EMERGENCY BLUE LIGHT PHONE** HEAT DETECTOR PANEL - 208V PANEL - SPECIAL SPECIAL PANELS: ERCSP: ELEVATOR RELCALL CONTROL AND SUPERVISORY PANEL FACP: FIRE ALARM CONTROL PANEL PACS: PHYSICAL ACCESS CONTROL SYSTEM TCP: TEMPERATURE CONTROL PANEL

ALL HEIGHTS ARE TO CENTER OF DEVICE UNLESS NOTED OTHERWISE. TOP: HEIGHT TO TOP OF DEVICE ANY HEIGHTS INDICATED IN PLANS SHALL SUPERCEDE THOSE LISTED HERE.

GENERAL NOTES ALL ELECTRICAL DEVICES, FIXTURES, EQUIPMENT AND FEEDERS SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, THE MANUFACTURER'S RECOMMENDED PROCEDURES, ALL APPLICABLE LOCAL AND STATE CODES, AMERICAN DISABILITIES ACT AND WITH THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE AND VA STANDARDS. PROVIDE ADDITIONAL SUPPORT FOR DEVICES, FIXTURES, EQUIPMENT AND FEEDERS WHERE THE BUILDING CONSTRUCTION IS NOT SUITABLE FOR DIRECT MOUNTING. FIRESTOP, DRAFTSTOP, SMOKESTOP AND/OR PROTECT THE ANNULAR SPACE AROUND ALL PENETRATIONS THROUGH WALLS, PARTITIONS, FLOORS, CEILING, AND ROOFS IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, UL LISTING REQUIREMENT AND THE APPLICABLE BUILDING CODES. VERIFY CEILING SYSTEMS AND PROVIDE MOUNTING ACCESSORIES, TRIMS AND ALL REQUIRED MOUNTING HARDWARE TO SUIT THE PARTICULAR INSTALLATION. PROTECT EXISTING UNDERGROUND AND BUILDING INTERIOR UTILITIES DURING CONSTRUCTION. BRANCH CIRCUIT CONDUCTORS SHALL BE 12 AWG COPPER MINIMUM. COORDINATE ANY AND ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION SO AS TO AVOID CONFLICT DURING CONSTRUCTION. ALL PANELS SHALL HAVE TYPED, COMPLETED DIRECTORIES INDICATING EQUIPMENT SERVED AND ROOM

NUMBER (AS INDICATED ON FINAL BUILDING ROOM SIGNAGE) OF EQUIPMENT LOCATION, OR SPARE, OR MANUFACTURER'S NAME AND MODEL NUMBER ARE GIVEN FOR DESCRIPTIVE PURPOSES, TO INDICATE A QUALITY STANDARD AND ARE NOT INTENDED TO LIMIT PRODUCTS TO A PARTICULAR MANUFACTURER. PRODUCTS DEEMED EQUAL AND APPROVED BY THE DESIGNER WILL BE ACCEPTED. ALL PRODUCTS MUST COMPLY WITH "BUY AMERICAN ACT".

10. ALL FEEDERS AND CIRCUITRY SHALL BE TORQUED PER THE PANEL, BREAKER, AND/OR PARTICULAR EQUIPMENT MANUFACTURER'S SPECIFICATIONS. 11. CIRCUITRY TO SWITCHES, RECEPTACLES, AND ALL OTHER DEVICES SHALL BE TERMINATED ON THE

DEVICE'S SCREW TERMINALS. MOUNTING HEIGHTS INDICATED ARE TO CENTER OF DEVICE, OUTLET, FIXTURE, OR EQUIPMENT UNLESS NOTED OTHERWISE.

13. ALL WIRE TERMINATIONS SHALL BE RATED FOR 75 DEGREES C.

14. ALL CONDUCTORS SHALL HAVE THHN/THWN INSULATION, UNLESS OTHERWISE NOTED.

ALL CONDUIT SHALL BE RGS OR EMT UNLESS OTHERWISE NOTED. FMC CONDUIT MAY BE USED ON VIBRATING EQUIPMENT. PVC MAY BE USED FOR UNDERGROUND OR CONCRETE-ENCASED. UNDERGROUND BRANCH CIRCUITS MAY BE DIRECT-BURIED PVC. UNDERGROUND FEEDERS SHALL BE CONCRETE-ENCASED.

ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE LABEL-LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY.

NO CONDUIT SHALL BE ROUTED BELOW THE LEVEL OF THE DOUBLE-TEE CONSTRUCTION. ALL CONDUITS ROUTED THROUGH DOUBLE-TEES SHALL BE THROUGH THE KNOCKOUTS PROVIDED FOR CONDUIT ROUTING. COORDINATE KNOCKOUT LOCATIONS WITH THE STRUCTURAL PLANS. IN CASE OF CONFLICTS OR DISCREPANCIES WITHIN OR AMONG THE CONTRACT DRAWINGS, THE BETTER QUALITY, MORE STRINGENT REQUIREMENTS OR GREATER QUANTITY OF WORK, AS DETERMINED BY THE GOVERNMENT, SHALL BE PROVIDED.

19. COMPRESSION COUPLINGS SHALL BE USED FOR EMT SIZED 3/4" TO 2" AND SET SCREW COUPLINGS WITH HARDENED STEEL SCREWS FOR EMT SIZES 2-1/2" TO 4".

20. IF FIBER IS USED TO REPLACE 4PR DUE TO DISTANCE LIMITATIONS, FIBER SHALL BE INSTALLED IN INNERDUCT

LIGHTNING PROTECTION SYSTEM:

INSTALL A U.L. MASTER LABEL LIGHTNING PROTECTION SYSTEM WHICH COMPLIES WITH CURRENT NATIONALLY RECOGNIZED CODES AND STANDARDS. SYSTEM TO CONSIST OF AIR TERMINALS (LIGHTNING RODS) SPACED AT 20 FEET ON CENTER ALONG THE PERIMETER, WITHIN 2 FEET OF EACH CORNER AND AT 50 FOOT SPACING IN MID-ROOF CONNECTED TO HEAVY CABLES EXTENDED TO GROUNDING RODS MINIMUM 10 FEET IN DEPTH. INSTALL TRANSIENT SURGE SUPPRESSORS AT ELECTRICAL AND TELEPHONE SERVICE ENTRIES. BOND LIGHTNING PROTECTION SYSTEM TO BUILDING GROUNDING ELECTRODE SYSTEM. ALL WORK TO COMPLY WITH U.L. STANDARD 780 AND NATIONAL ELECTRIC CODE, CURRENT EDITION.

LIGHT FIXTURE SCHEDULE BASIS OF DESIGN FIXTURE LUMENS (SEE NOTE 5) CREE MODEL# 12" SQUARE PENDANT MOUNT LED PARKING STRUCTURE LUMINAIRE; TYPE V PKG-304-5S-PD-04-E-UL-BK-350-ML SHORT DISTRIBUTION; WITH INTEGRAL PIR OCCUPANCY SENSOR, AMBIENT MULTI-LEVEL ML HIGH 350mA: FULL POWER 5105 4000K LIGHT SENSOR AND FIELD ADJUSTABLE MULTI-LEVEL OPTION DRIVER (350mA DRIVER ML LOW 125mA: POSITION 4 70 CRI HIGH LEVEL AND 125mA LOW LEVEL); BLACK. MOUNT SUCH THAT BOTTOM OF (COORDINATE ML OPTIONS IN FIELD) FIXTURE IS 2" ABOVE BOTTOM OF DOUBLE TEE, CENTERED BETWEEN RIBS OR APPROVED EQUAL UNLESS TO AVOID SEAMS. 4' LINEAR, LENSED, WALL OR CEILING SURFACE MOUNT LED, WITH LITHONIA MODEL # 0 WL4-30L-EZ1-LP840-NES7ADCX-DIM10 OCCUPANCY SENSOR AND PHOTOCELL. DIMS TO 10% WHEN 4000K DRIVER OR APPROVED EQUAL UNOCCUPIED. 4' ROUGH-SURFACE VANDAL-RESISTANT LINEAR LED WITH CLEAR LITHONIA MODEL # H-0-1 POLYCARBONATE LENS; MEDIUM DISTRIBUTION; INSTALLED SUCH VAP-6000LM-PCL-MD-MVOLT-40K-80CRI DRIVER 80 CRI THAT IT IS FLUSH WITH BOTTOM OF DOUBLE-TEE CONSTRUCTION. OR APPROVED EQUAL LITHONIA MODEL# SURFACE MOUNT EMERGENCY DOUBLE HEAD EMERGENCY LIGHT EU2LEDM12 FIXTURE WITH 90-MINUTE BATTERY BACKUP. SUITABLE FOR DAMP OR APPROVED EQUAL LITHONIA MODEL# SINGLE-FACE LED EMERGENCY EXIT SIGN WITH DIRECTIONAL INDICATOR. WITF-GY-1-R GRAY BODY, RED FACE. OR APPROVED EQUAL 4' x 7" x 4.5" ENCLOSED AND GASKETED FIBERGLASS EXTREME COLUMBIA MODEL# 4000K 80 CRI ENVIRONMENT LED WITH RIBBED FROSTED ACRYLIC SHIELDING; WET LXEM4-40LW-RFA-EU OR APPROVED EQUAL TWO-HEAD, RECTANGULAR, LED, POLE-MOUNTED EXTERIOR AREA LUMINAIRE WITH 25' POLE BLACK BODY, BLACK POLE, SUITABLE FOR WET CREE MODEL # LOCATIONS. TYPE IV MEDIUM DISTRIBUTION. EACH HEAD SHALL HAVE ARE-EDG-4MB-DA-12-E-UL-BK-525-P PP2 INTEGRAL PHOTOCELL TO SWITCH FIXTURES BETWEEN FULL POWER AT (PER HEAD) OR APPROVED EQUAL NIGHT AND OFF DURING DAY. PROVIDE FOR POLE-MOUNTED SECURITY CAMERAS. COORDINATE WITH PRECAST MANUFACTURER FOR POLE THREE-HEAD, RECTANGULAR, LED, POLE-MOUNTED EXTERIOR AREA LUMINAIRE WITH 25' POLE. SUITABLE FOR WET LOCATIONS. SIDE HEADS SHALL BE TYPE IV MEDIUM DISTRIBUTION, CENTER HEAD SHALL BE TYPE ARE-EDG-4MB-DA-12-E-UL-BK-525-P II MEDIUM DISTRIBUTION. EACH HEAD SHALL HAVE INTEGRAL PHOTOCELL 16242 TO SWITCH FIXTURES BETWEEN FULL POWER AT NIGHT AND OFF DURING ARE-EDG-2M-DA-12-E-BK-525-P **DRIVERS** (PER HEAD) OR APPROVED EQUAL DAY, BLACK FINISH, PROVIDE FOR POLE-MOUNTED SECURITY CAMERAS. COORDINATE WITH PRECASE MANUFACTURER FOR POLE BASE. 1"X1"X24" LINEAR LED FIXTURE WITH 30° BEAM ANGLE, ON 12" BRACKET, i2SYSTEMS: V3285A-23BBD, ELEC. DRIVER MVOLT ROTATABLE. WET LISTED. OUTDOOR E05PW PACK VLAX2-12 BRACKET i2SYSTEMS: V3285A-83BBD, OUTDOOR 1"X1"X18" LINEAR LED FIXTURE WITH 30° BEAM ANGLE, ON A ROTATABLE E05PW PACK BRACKET. WET LISTED. VLA-14 BRACKET EXTERIOR WALL MOUNTED LED LUMINAIRE WITH TWO (2) ELECTRONIC CREE MODEL# 2529 ELEC. DRIVER DRIVERS AND TYPE III DISTRIBUTION. SUITABLE FOR WET LOCATIONS. XSPW-A-0-3-F-G-2-T-P INTEGRAL PHOTOCELL. BLACK FINISH OR APPROVED EQUAL

1. EM - EMERGENCY LIGHT (CIRCUITED FROM EMERGENCY POWER).

EM NL - UN-SWITCHED NIGHT LIGHT (CIRCUITED FROM EMERGENCY POWER). 2. CONTRACTOR SHALL PROVIDE LIGHT FIXTURE SHILEDS AS REQUIRED TO PREVENT LIGHT TRESPASS OVER PROPERTY LINES.

ALL LIGHTING SHALL BE DAYLIGHT COLOR SPECTRUM. 4. VERIFY ALL LIGHT FIXTURE MOUNTING TYPES AND COLORS WITH ARCHITECT.

5. MANUFACTURER'S NAME AND MODEL NUMBER ARE GIVEN FOR DESCRIPTIVE PURPOSES. TO INDICATE A QUALITY AND PERFORMANCE STANDARD, AND ARE NOT INTENDED TO LIMIT PRODUCTS TO A PARTICULAR MANUFACTURER. PRODUCTS DEEMED EQUAL AND APPROVED BY THE DESIGNER WILL BE ACCEPTED.

6. FOR ALL LED FIXTURES, THE FIXTURE SHALL BE CAPABLE OF SELF-RESETTING TO THE SWITCHED/CONTROLLED STATE DURING ANY FLUCTUATION IN POWER SUPPLY WHERE AUTOMATIC PROTECTIVE MEASURES DISABLE THE LED LAMPS. PROVIDE A LETTER OR STATEMENT FROM THE MANUFACTURER, OR OTHER ACCEPTABLE PROOF, THAT ALL LED FIXTURES, WITH OR WITHOUT BROWNOUT PROTECTION, WILL RETURN TO THE SWITCHED/CONTROLLED STATE AUTOMATICALLY. PROVIDE STATEMENT WITH THE FIXTURE SUBMITTALS.

BID ALTERNATES

ALT DESCRIPTION

DO NOT PROVIDE DESIGNATED FALL DETERRENT/SECURITY SCREENING AND CARD READERS AT ENTRANCES TO STAIRWELLS. REFER TO DRAWINGS ON GI103 FOR EXTENT OF FALL DETERRENT/SECURITY SCREENING TO BE REMOVED. DO NOT PROVIDE CARD READERS AT ENTRANCE TO STAIR TOWERS FOR DOORS LL05 AND 104.

DO NOT PROVIDE THE BRICK VENEER AT THE NORTHEAST STAIR TOWER AND THE SOUTHWEST STAIR TOWER. DO NOT PROVIDE THE ALUMINUM STOREFRONT WINDOW ENCLOSURE OF THE NORTHEAST STAIR TOWER. PROVIDE METAL GUARDRAILS AT WINDOW OPENINGS IN LIEU OF ALUMINUM STOREFRONT.

DO NOT PROVIDE FALL DETERRENT IN ITS ENTIRETY ON ALL LEVELS.

DO NOT PROVIDE AREA #1 - LEVEL 3. REFER TO DRAWINGS ON GI103 FOR EXTENT OF AREA DEDUCT.

DO NOT PROVIDE THE ALUMINUM STOREFRONT ENCLOSURE OF THE TOP FLOOR (LEVEL 3) LOBBY ENCLOSURE. DO NOT PROVIDE THE ALUMINUM STOREFRONT WINDOW ENCLOSURE OF THE SOUTHWEST STAIR TOWER. PROVIDE METAL GUARDRAILS AT WINDOW OPENINGS IN LIEU OF ALUMINUM STOREFRONT.

DO NOT PROVIDE AREA #2 - LEVEL 3. REFER TO DRAWINGS ON GI103 FOR EXTENT OF AREA DEDUCT.

DO NOT PROVIDE AREA #3 - LEVEL 3. REFER TO DRAWINGS ON GI104 FOR EXTENT OF AREA DEDUCT.

DO NOT PROVIDE AREA #4 - LEVEL 2. REFER TO DRAWINGS ON GI104 FOR EXTENT OF AREA DEDUCT. DO NOT PROVIDE SECOND ELEVATOR #2 AND

ASSOCIATED EQUIPMENT.

DO NOT PROVIDE PTZ AND FIXED CAMERAS THROUGHOUT GARAGE. ALL INFRASTRUCTURE IS TO REMAIN IN BASE BID FOR FUTURE CONNECTIVITY.

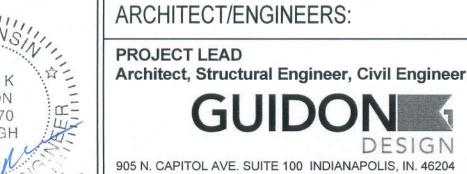


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Drawing Title ELECTRICAL NOTES, LEGENDS, AND LIGHT FIXTURE SCHEDULE Approved for Design Concept: **FACILITY MANAGEMENT DIVISION MANAGER**

Project Title PARKING STRUCTURE - LOT 7 CLEMENT J ZABLOCKI VAMC

BID SET

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